

0761: INSPIRING SCHOOL STUDENTS TO BECOME SURGEONS – A SOLUTION TO AN IMMINENT RECRUITMENT CRISIS?

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Aim: The NHS faces unprecedented challenges and an uncertain future, which may soon deter high school graduates from applying to medical school. The Royal College of Surgeons has developed the 'Surgery in Schools' initiative - facilitating university surgical societies to work with local schools. However, there is currently no evidence to validate such programmes. Our aim was to pilot a novel protocol for a large educational event that could be replicated throughout the country, and assess whether these events can successfully encourage students to pursue careers in medicine and surgery.

Method: Lectures and practical workshops were delivered to 49 students, aged 16–18, all of whom were interested in careers in the medical profession. Outcomes were assessed on Likert scale responses using questionnaires pre- and post- event.

Result: A statistically significant ($p < 0.001$) gain of knowledge on attributes and tasks of a surgeon, and how the application process to medical school works, was discovered. 98% of attendees agreed or strongly agreed to 'this event has encouraged me to pursue a career in medicine/surgery'.

Conclusion: This event was perceived to be informative and to positively influence decision-making. Nationwide propagation using this RCS 'bottom-up' approach may be one method of averting an imminent recruitment crisis.

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0787: COLLECTING EVIDENCE FOR “GMC RECOGNITION AND APPROVAL OF TRAINERS”: HOW DO SURGICAL TRAINEES AND SURGICAL CONSULTANTS COMPARE?

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Aim: The GMC have mandated Local Education and Training Boards and medical schools to collect evidence on how trainers meet specified “trainer criteria.” Trainees are accustomed to collating such evidence using online logbooks. The aim was to compare consultant and trainee uptake of an online logbook to provide this GMC evidence.

Method: Anonymous data from 2 regions was requested from T-Log.co.uk, an online teaching feedback request system. Data was dichotomised into 2 groups (consultants and junior doctors) for surgical and non-surgical specialties. Volume of data entry, teaching session type and whether the user opted to collect feedback were compared between groups. Chi-squared, Mann-Whitney and Student t-tests were used as appropriate.

Result: 4,123 teaching episodes were recorded from September 2014 to January 2016. Doctors in surgical specialties delivered 257.3 sessions in surgical specialties were recorded by consultants (1.2%) compared to 180 (4.7%) in other specialties ($p = 0.008$). The 3 consultant surgeon sessions all had online feedback requested compared to 123 (68%) in other specialties ($p = 0.893$). Significant variation also existed in type of session.

Conclusion: Trainees have successfully adopted the use of an online teaching logbook. There remains scope for consultants to use it to provide evidence for GMC trainer accreditation.

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0789: DEVELOPING A PROTOCOL TO CONDUCT A STUDENT-DRIVEN STUDY ACROSS EUROPE: THE EUROSURG-1 STUDY

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Aim: The Student Audit and Research in Surgery (STARSurg) group engages UK students in high quality research, enthusing and equipping them

with the skills to become research active surgeons in the future. Our aim is to replicate the STARSurg model across Europe.

Method: A meeting of medical students was convened at the European Society of Coloproctology in Dublin in September 2015. The students agreed to set up a new network (EuroSurg) and decided that their first study (EuroSurg-1) would investigate the relationship between body mass index and postoperative complications following major gastrointestinal surgery. EuroSurg-1 is being disseminated through national surgical associations, medical school networks and social media. Using a collaborative authorship model, all collaborating students will be acknowledged as PubMed citable co-authors.

Result: An international management group runs EuroSurg, with a membership including students and trainees representing Ireland, Italy, Spain, Turkey, United Kingdom and the Netherlands. Over 700 students have registered to participate in EuroSurg, with students active at 104 universities. Over 2000 patients are expected to be enrolled in EuroSurg-1.

Conclusion: The rapid expansion of this first European student-driven network demonstrates the desire of medical students and surgical trainees across Europe to actively participate in high-quality clinical research.

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0839: OPERATIVE EXPERIENCE VERSUS COMPETENCE IN A SINGLE UK DEANERY: A CURRICULUM CONCORDANCE AND LEARNING CURVE ANALYSIS

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Background: Certification of Completion of Training (CCT) in General Surgery requires proof of competence of index operations by means of 3, level 4 consultant validated Procedural Based Assessments (PBAs). The aim of this study was to examine the relationship between index operative experience and competence.

Method: We assessed consecutive 69 Higher Surgical Trainees (HST) appointed to a single Deanery (Wales) 2007–2014. PBAs were compared with e-logbooks to determine the relationship between index operative experience and achievement of a third level 4 competence (L4C) related to the indicative procedures of; Emergency Laparotomy (EL, target 100), Hartmann's (HMN, 5), Appendicectomy (APX, 80), Segmental Colectomy (SC, 20), Laparoscopic Cholecystectomy (LC, 50) and Inguinal Hernia (IH, 80).

Result: EL L4C was achieved at a median of 76 (15–136) cases, HMN L4C at 17 (7–27) cases ($p = 0.009$ vs. EL), APX L4C at 107 (20–206) cases, SC L4C at 52 (15–131) cases, LC L4C at 72 (40–197) cases, and IH L4C at 64 (17–132) cases.

Conclusion: The learning curve and caseload required to demonstrate L4C related to specific procedure varied over 4-fold, from 0.76 to 3.4 times the indicative target number guidance. CCT logbook targets should be reconsidered to reflect the competencies demanded by the curriculum.

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0856: MODERN PARADIGMS IN SURGICAL TRAINING – AN INTERNATIONAL QUALITATIVE STUDY TO DETERMINE FACTORS AFFECTING THE IMPLEMENTATION OF SIMULATION-BASED TRAINING PROGRAMMES

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Introduction: Despite evidence demonstrating the advantages of simulation training in general surgery, it is not integrated into surgical training programmes worldwide. The aim of this study is to identify barriers and facilitators to the implementation and uptake of surgical simulation training programmes.

Method: An international qualitative study was conducted using semi-structured interviews of general surgical trainees and experts. Interviews were audio-recorded and transcribed verbatim. Transcripts underwent emergent theme analysis by two researchers.

Result: 20 surgical trainees and 20 experts were recruited from the UK, USA, France, Japan and Canada. Barriers to simulation-based training were identified based on several themes including financial cost, practicality, access, protected training time and translational clinical benefits.

Participants described cost [83%], specialty mandate [83%] and facilities access as principal barriers. Key common facilitators included board mandate [84%] and on-going assessment [80%]. Participants thought that simulation training could improve patient outcomes [80%] and be a cost effective method [80%]. All participants described an absence of correlative evidence between simulation training and clinical outcomes.

Conclusion: There is agreement that simulation training could improve outcomes and may be cost effective. This has key implications for the delivery of these programmes, however, the uniformity of implementation remains a worldwide issue.

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0873: HOW DOES UNIT WORKLOAD TRANSLATE TO TRAINING OPPORTUNITY? AN ANALYSIS OF TRAINEE LOGBOOKS

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Introduction: Criteria for the award of CCT in general surgery specify that trainees should log 1600 cases as operating surgeon (average 67 cases per quarter in HST). Inadequate logbook numbers may threaten trainee progression.

Aim: To assess the translation of available general surgical cases into training opportunities in a teaching hospital.

Method: A spreadsheet populated from the electronic theatre management system was disseminated weekly through nhs.net email from 05/09/2015 to 30/11/2015. Trainees recorded cases attended and their role as per ISCP: cases as assistant were excluded.

Result: 841 cases were scheduled (533 elective, 308 emergency). Two trainee slots were unfilled on the rota; unit trainees covered some extra lists. Complete data was available for 5 of 6 trainees. Median number of cases logged on rostered shifts was 52 (40–68). Median number of shifts rostered was 49 (38–54). 13 supplementary shifts added 33 cases for 1 trainee; another senior trainee recorded 68 cases when rostered in a high intensity part of the rota and added 14 cases working 3 extra shifts.

Conclusion: Most trainees in this unit logged less than the 67 cases expected in this quarter during rostered shifts. Trainees may struggle to meet indicative targets given current opportunities for operating.

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1054: SURGICAL SIMULATION TRAINING: WHAT DO YOU WANT AND WHERE DO YOU WANT IT?

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Aim: To investigate interest in and exposure to surgical simulation training among core surgical trainees and then to assess the availability of surgical simulation training equipment across the country, with the prospect of creating a core surgery simulation curriculum.

Method: Core surgical trainees were sent a web-based survey, investigating previous simulation experience, availability/knowledge of equipment/courses within their deanery, and simulation skills/scenarios they would be interested in. Data were collated and analysed to determine a potential core surgery simulation curriculum.

Result: Seven deaneries gave permission to contact trainees with 106 respondents. All respondents felt simulation was useful to their development with 92.3% reporting previous experience of surgical simulation training. 57% were aware of training facilities within their deanery, with 67% of these having used these facilities. 60% felt facilities should be available within both trust and deanery, with 25% reporting their deanery

already provided formal simulation training. Most desirable courses were 'management of the critically injured patients', 'basic skills in endoscopy', 'basic skills in laparoscopy' and 'team/theatre and operative management'.

Conclusion: This study has demonstrated that core surgical trainees value simulated practice and desire more exposure. Therefore, it is suggested that mandatory simulation training is included into the Intercollegiate Surgical Curriculum.

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1076: HIGH INTENSITY SURGICAL TRAINING – ADAPTING TO THE LEARNERS NEEDS

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High Intensity Surgical Training was introduced in our hospital to provide a high-level and consistent teaching programmed to foundation doctors on surgery. This is a requirement for foundation training and an opportunity for more senior doctors to be involved in teaching. To help this program adapt to the needs of the learners we collected regular feedback: we will present this along with adaptations made in response to suggestions.

Junior doctors were asked to rate themselves from 1 (poor) to 10 (excellent) in terms of knowledge, confidence and competence in domains from their training program. Over the course we found an improvement in knowledge from 4.9 to 7.1 ($p=0.009$), in Confidence from 4.5 to 7.4 ($p=0.011$) and in Competence from 4.6 to 7.2 ($p=0.007$). After the course all doctors surveyed stated the teaching program had been useful, particular comments applauding relevance and variety. Areas to improve included for some sessions to be more clinically orientated and for a consistent venue.

We have now introduced some specialists to teach, while keeping sessions that could lose clinical focus remain with the general surgical team, e.g. imaging. We have secured a consistent venue and will continue to gather feedback to guide session choice.

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1108: DEDICATED TRAINING LISTS CAN SIGNIFICANTLY IMPROVE TRAINEES' EXPOSURE TO OPEN INGUINAL HERNIORRAPHY

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Aim: Following the instigation of treatment centres, operative opportunity for trainees to perform index procedures, such as open inguinal herniorrhaphy, is declining.

This study aims to quantify the decline in inguinal herniorrhaphy in a district general hospital and to examine the effect of introducing dedicated training lists.

Method: Data was collected retrospectively:

1. Inguinal hernia operations August 2003 - July 2015 were identified using SURGINET and subdivided by type (laparoscopic/open).
2. Operation notes were analysed for open procedures (August 2013 - July 2014) and compared with those following the introduction of fortnightly training lists (August 2014 - July 2015), recording surgeon grade and type of anaesthesia.

Result: The total number of inguinal hernia operations halved over the 12-year period: 461 (2003–04) to 209 (2014–15). Laparoscopic procedures made up 9% of all repairs during this period.

Following introduction of training lists, core trainees performed significantly more open general anaesthetic/spinal hernia repair: 2014–15: 27/131 (21%) compared to 2013–14: 14/150 (9%) ($p<0.01$, z-score, two-tailed).